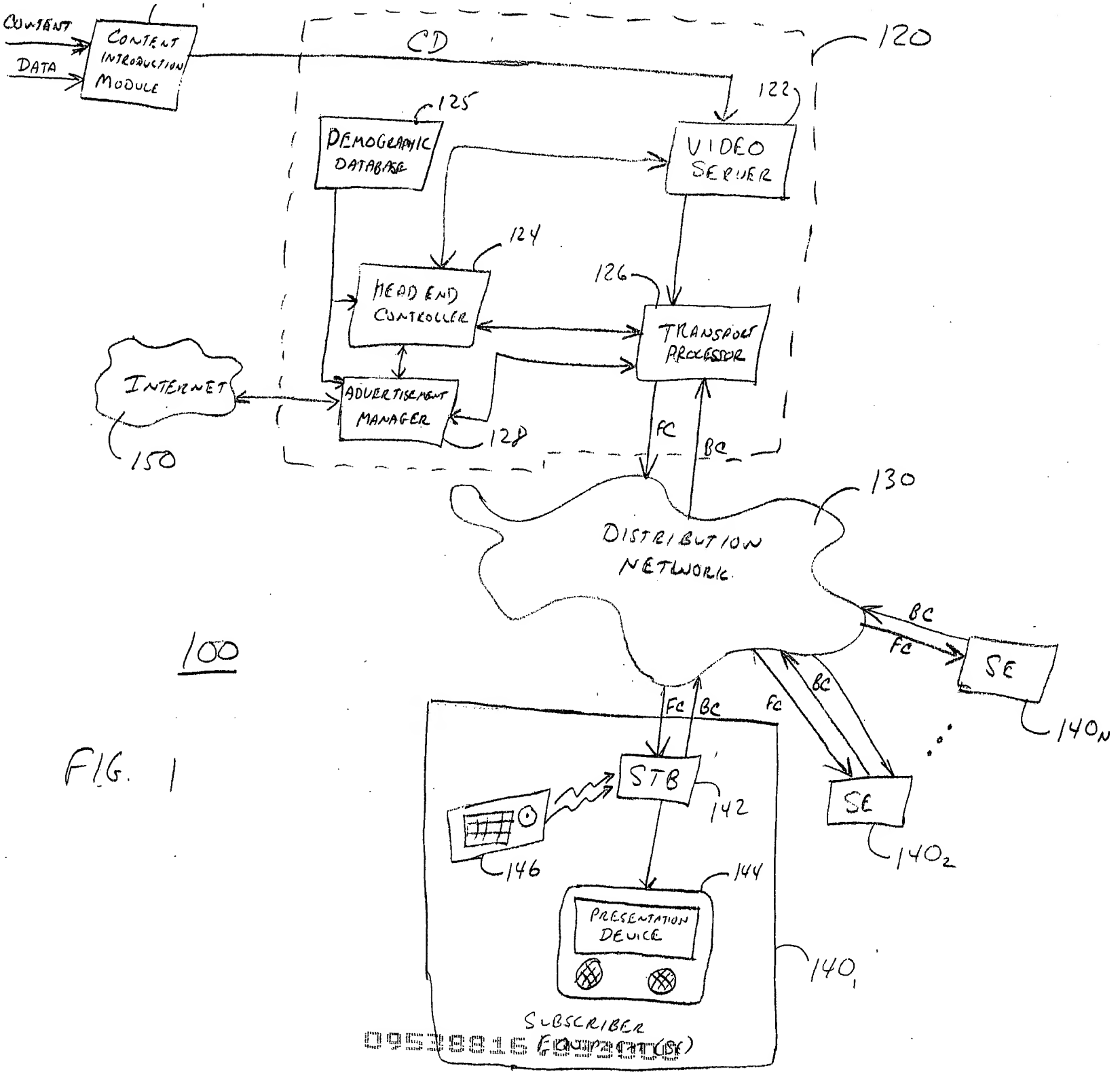
CONTENT
DATA
CONTENT INTRODUCTION MODULE
CD
120
125
DEMOGRAPHIC DATABASE
122
VIDEO SERVER
124
HEAD END CONTROLLER
126
TRANSPORT PROCESSOR
INTERNET
150
ADVERTISEMENT MANAGER
128
FC
BC
130
DISTRIBUTION NETWORK
100
BC
FC
SE
140N
FC
BC
FC
BC
STB
142
SE
140₂
146
144
PRESENTATION DEVICE
140₁
SUBSCRIBER
09539816 030401(BK)

FIG. 1

Interaction Diagram

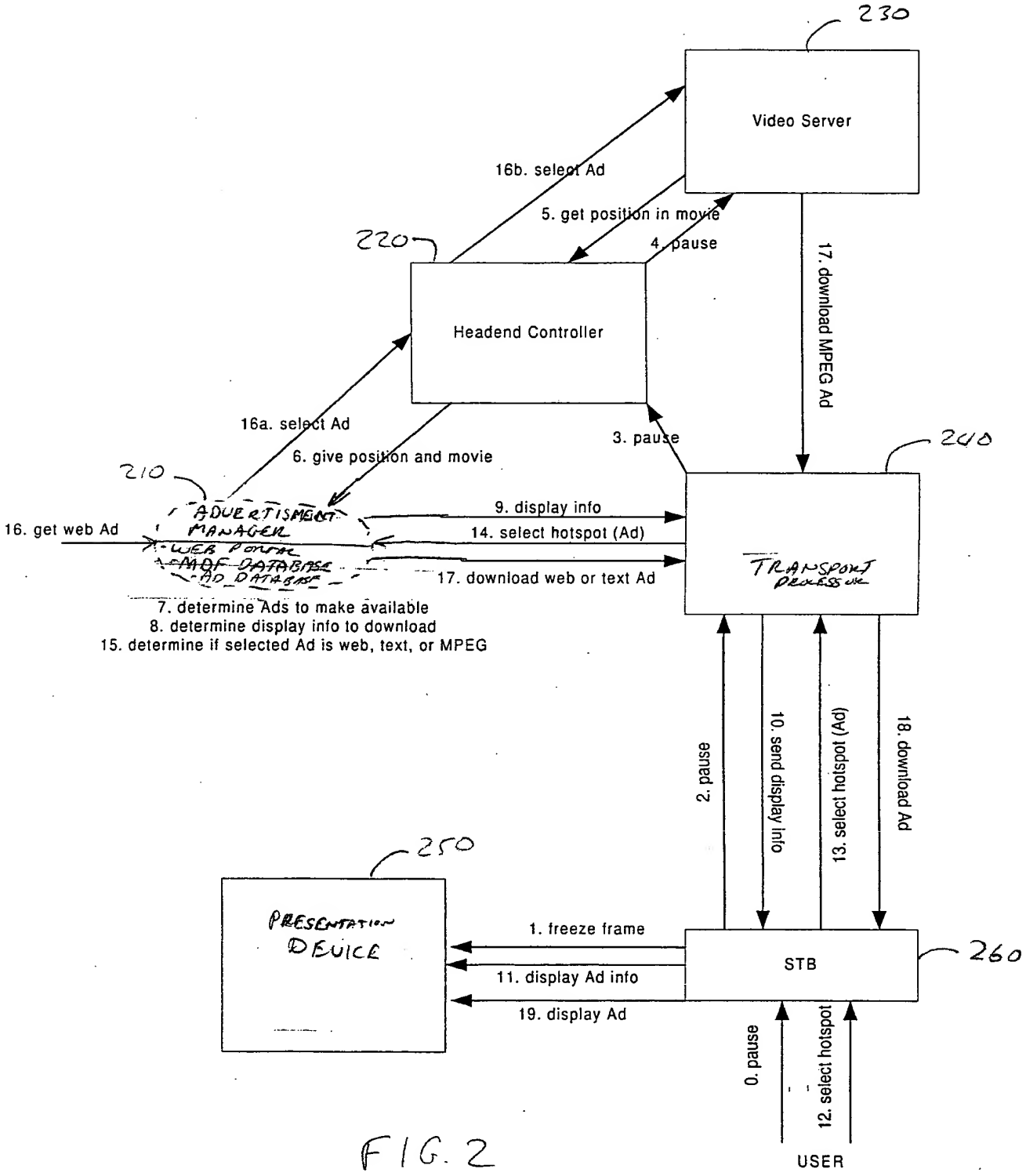

FIG. 2

Content Data Flow

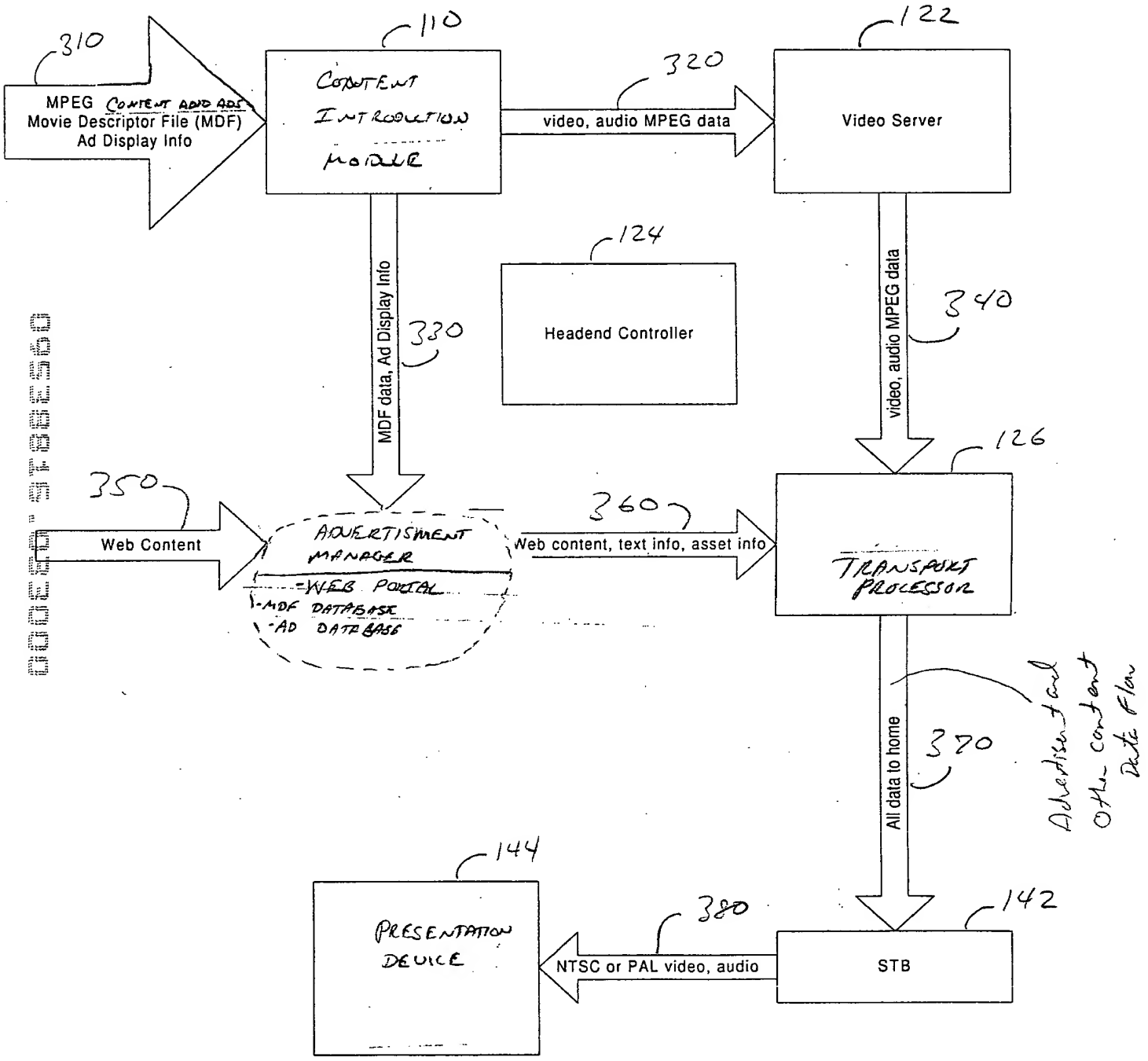

FIG. 3

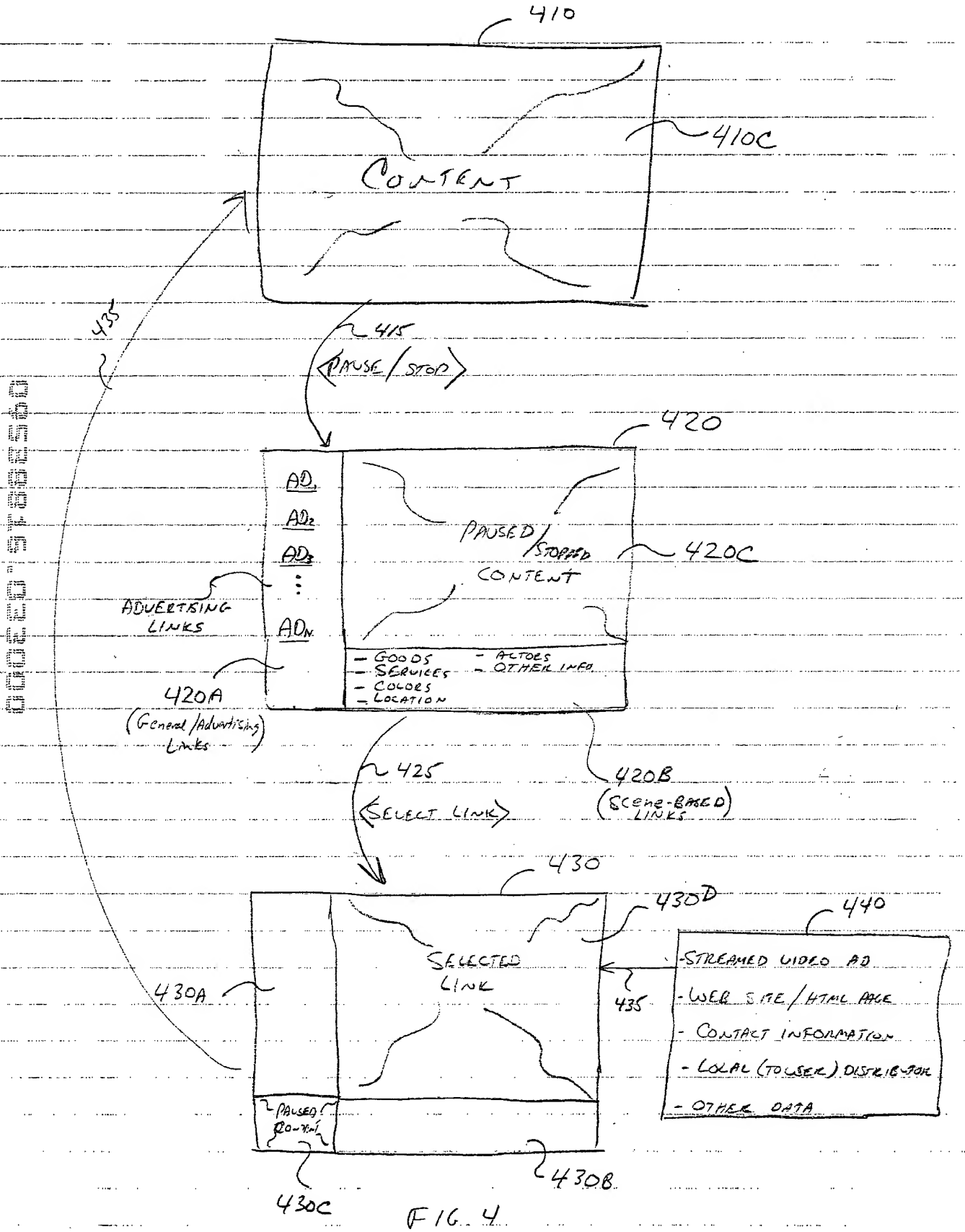
410
CONTENT
410C
435
415
PAUSE / STOP
420
AD1
AD2
AD3
ADN
ADVERTISING LINKS
PAUSED / STOPPED CONTENT
420C
- GOODS
- SERVICES
- COLORS
- LOCATION
- ACTORS
- OTHER INFO
420A
(General/Advertising Links)
425
SELECT LINK
420B
(Scene-BASED LINKS)
430
430D
440
SELECTED LINK
-STREAMED VIDEO AD
-WEB SITE/HTML PAGE
- CONTACT INFORMATION
- LOCAL (TO USER) DISTRIBUTOR
- OTHER DATA
435
430A
PAUSED POINT
430C
430B

FIG. 4

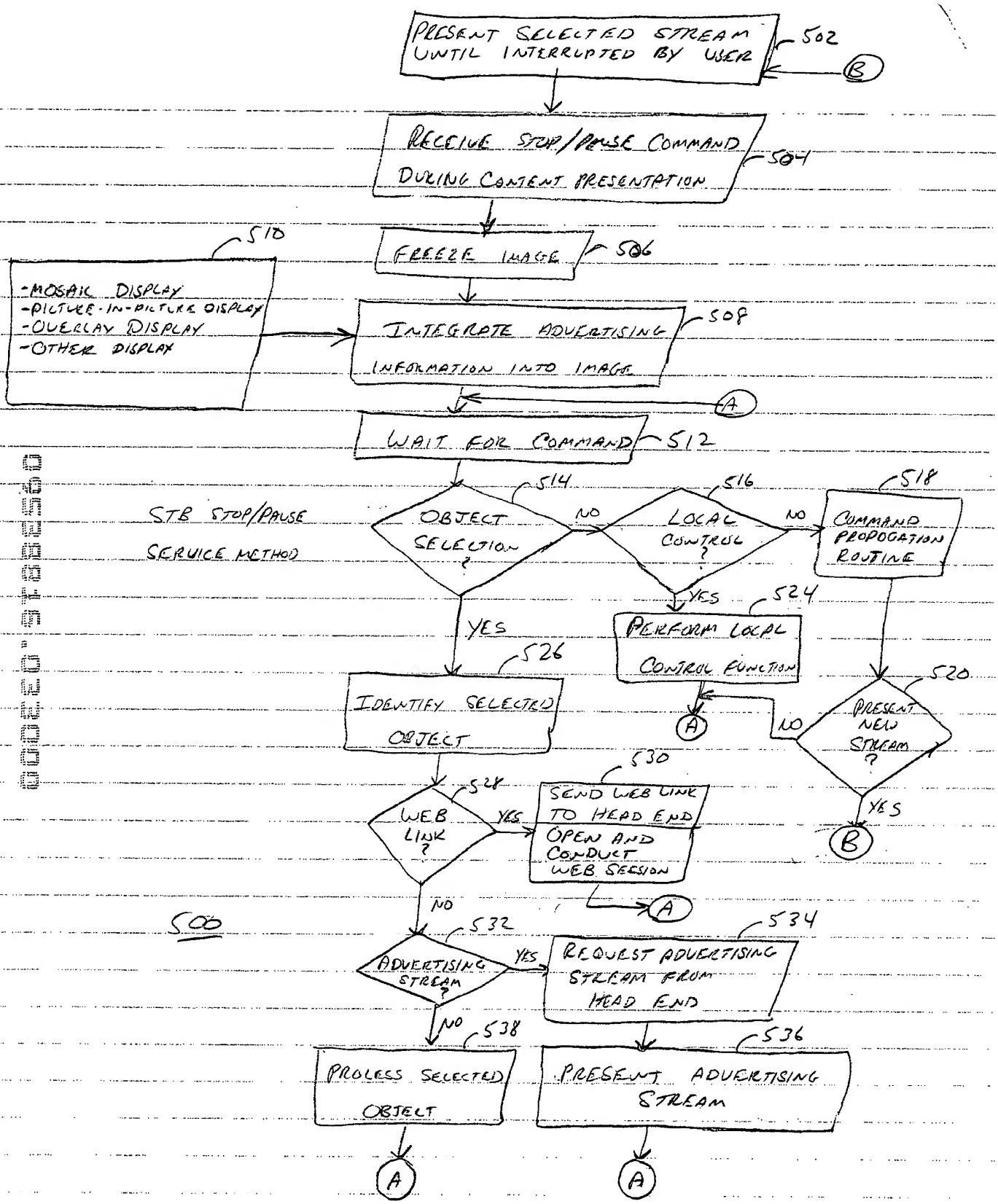
PRESENT SELECTED STREAM UNTIL INTERRUPTED BY USER
502
B
RECEIVE STOP/PAUSE COMMAND DURING CONTENT PRESENTATION
504
FREEZE IMAGE
506
510
-MOSAIC DISPLAY
-PICTURE-IN-PICTURE DISPLAY
-OVERLAY DISPLAY
-OTHER DISPLAY
INTEGRATE ADVERTISING INFORMATION INTO IMAGE
508
A
WAIT FOR COMMAND
512
STB STOP/PAUSE SERVICE METHOD
OBJECT SELECTION ?
514
NO
LOCAL CONTROL ?
516
NO
COMMAND PROPOGATION ROUTINE
518
YES
PERFORM LOCAL CONTROL FUNCTION
524
YES
IDENTIFY SELECTED OBJECT
526
A
NO
PRESENT NEW STREAM ?
520
YES
B
WEB LINK ?
528
YES
SEND WEB LINK TO HEAD END
OPEN AND CONDUCT WEB SESSION
530
A
NO
500
ADVERTISING STREAM ?
532
YES
REQUEST ADVERTISING STREAM FROM HEAD END
534
NO
PROCESS SELECTED OBJECT
538
PRESENT ADVERTISING STREAM
536
A
A

FIG. 5

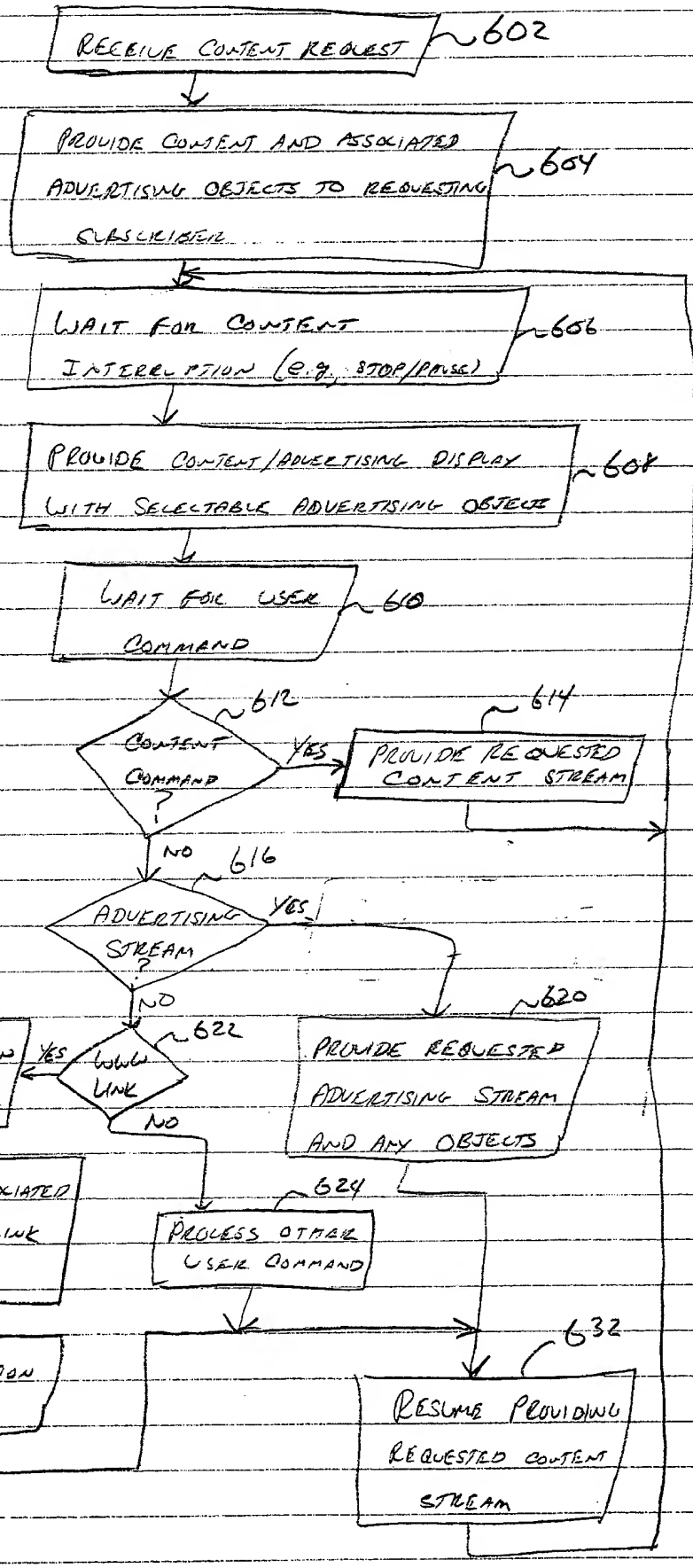
RECEIVE CONTENT REQUEST
602
PROVIDE CONTENT AND ASSOCIATED ADVERTISING OBJECTS TO REQUESTING SUBSCRIBER
604
WAIT FOR CONTENT INTERRUPTION (e.g., STOP/PAUSE)
606
PROVIDE CONTENT/ADVERTISING DISPLAY WITH SELECTABLE ADVERTISING OBJECTS
608
WAIT FOR USER COMMAND
610
600
612
CONTENT COMMAND ?
YES
614
PROVIDE REQUESTED CONTENT STREAM
NO
616
ADVERTISING STREAM ?
YES
NO
620
PROVIDE REQUESTED ADVERTISING STREAM AND ANY OBJECTS
622
626
OPEN WEB SESSION WITH SUBSCRIBER
YES
WWW LINK
NO
628
PROVIDE PAGE ASSOCIATED WITH SELECTED LINK TO SUBSCRIBER
624
PROCESS OTHER USER COMMAND
630
PROVIDE WEB SESSION INTERACTION
632
RESUME PROVIDING REQUESTED CONTENT STREAM

FIG. 6